(c) and (d) Eight rainwater harvesting projects were approved for implementation in Orissa under the above scheme at a cost of Rs. 15.08 crore out of which Rs. 11.51 crore has been released to the implementing agencies.

**Contaminated ground water in Delhi**

4795. SHRI R. P. GOENKA : Will the Minister of WATER RESOURCES be pleased to state:

(a) whether it is a fact that a joint study conducted by the Central Ground Water Board and the Central Pollution Control Board has brought out that Delhi's ground water contains excessive salinity, nitrate and flourosis, causing extensive damage to the health of the inhabitants of the city; and

(b) if so, the details of short term/long term steps taken to identify the basic causes of the contamination and to ensure supply of clean drinking water to the capital?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRIMATI BIJOYA CHAKRAVARTY) : (a) A study on the "Status of Ground Water Quality and Pollution Aspects in NCT of Delhi" was undertaken jointly by the Central Ground Water Board (CGWB) and the Central Pollution Control Board during 1997-98. The study indicated that ground water quality in some parts of Delhi has higher concentration of total dissolved solids, electrical conductivity, chloride, nitrate, sulphate and fluoride.

(b) The short term/long term steps taken to identify the basic causes of contamination and to ensure supply of clean drinking water to the capital are as follows:—

(i) CGWB regularly carries out studies on ground water quality in NCT of Delhi. During the course of studies, the problematic areas are identified and further detailed studies are taken up in such areas.

(ii) CGWB is monitoring ground water quality in NCT of Delhi on regular basis.

(iii) CGWB has deployed mobile chemical laboratory in different localities of NCT of Delhi and surrounding areas for the benefit of public and to get ground water samples analysed.

(iv) The Delhi Jal Board has identified hand pumps and other structures in the polluted areas where the shallow ground water is not fit for human consumption and painted them red with warning.

(v) Registration of ground water extracting tubewells/boreholes in NCT of Delhi by Central Ground Water Authority (CGWA) for streamlining the ground water extraction activities.

(vi) CGWA has notified South and South-West districts of NCT of Delhi based on the studies carried out by the CGWB.

(vii) CGWA has carried out mass awareness campaign to create awareness among general public, industrialist and industrial workers regarding pollution and over-exploitation of ground water.

(viii) Pilot projects of rain water harvesting has been taken up in NCT of Delhi.

(ix) CGWB has provided technical guidance and assistance to various institutions, private agencies, NGO and general public desirous for taking up rain water harvesting in their premises.

**Flood prone areas**

4796. PROF. ALKA BALRAM KSHATRIYA : Will the Minister of WATER RESOURCES be pleased to state :

(a) the State-wise flood prone areas in the country recorded in each plan period from First to Ninth Five Year Plan;

(b) whether dams on the rivers are causing dryness/silting of all river beds thereby causing floods; and

(c) if so, the remedial steps Government propose to take in this regard?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRIMATI BIJOYA CHAKRAVARTY) : (a) Rashtriya Barh Ayog (RBA) has assessed the flood prone area in the country as 40 mha. in 1980 using the data on flood affected area during 1953—78.

The flood affected area is collected and reported by Revenue Authorities of States. Central Water Commission has compiled the data since 1953 on the basis of information received from State Revenue Authorities. The Statement of State-wise and Plan-wise total flood affected area from 1st Plan to IXth Plan is enclosed (*See* below).

(b) and (c) Dams do have some morphological impact on the upstream as well as downstream of the river. The impact varies from location to location and also temporarily. But the hypothesis that dams can cause dryness or silting is unfounded in the absence of any back-up scientific study.